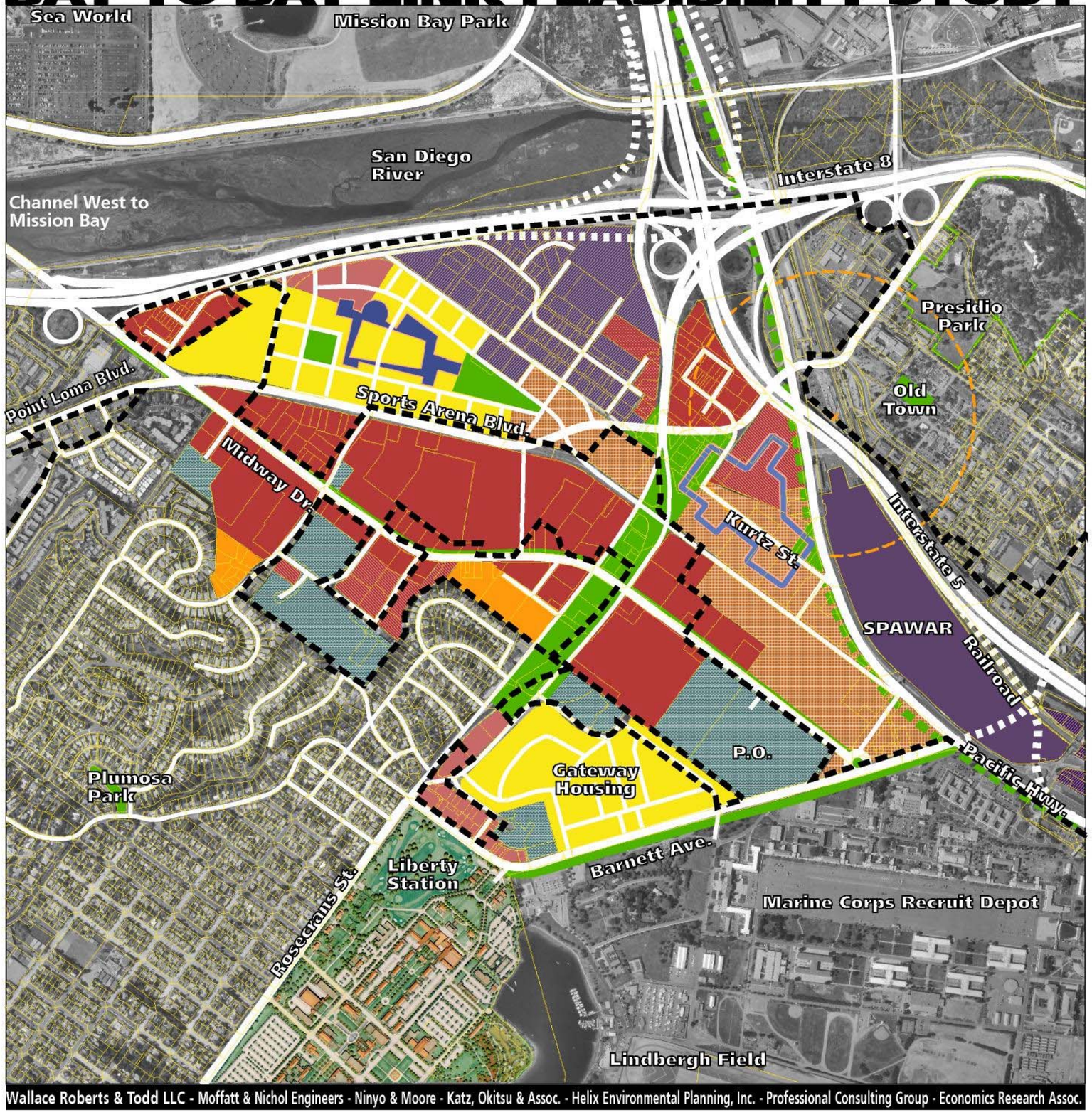
BAY TO BAY LINK FEASIBILITY STUDY



Wallace Roberts & Todd LLC - Moffatt & Nichol Engineers - Ninyo & Moore - Katz, Okitsu & Assoc. - Helix Environmental Planning, Inc. - Professional Consulting Group - Economics Research Assoc.

Non-Tidal Channel
Concept Alternative

Midway / Pacific Highway Corridor Community Plan Amendment 1/99
Proposed Land Use

- Redevelopment Area Boundary
- Residential Medium 29 DU/AC
- Residential Medium / High 43 DU/AC
- Commercial - Community
- Commercial - Neighborhood
- Commercial - Office
- Commercial - Recreation
- Commercial - Transportation Related
- Commercial - Visitor
- Industrial Park
- Light Industrial
- Institutional
- Multiple Use
- Public Park / Open Space
- Water

x 1/4 Mile radius Transit Stop

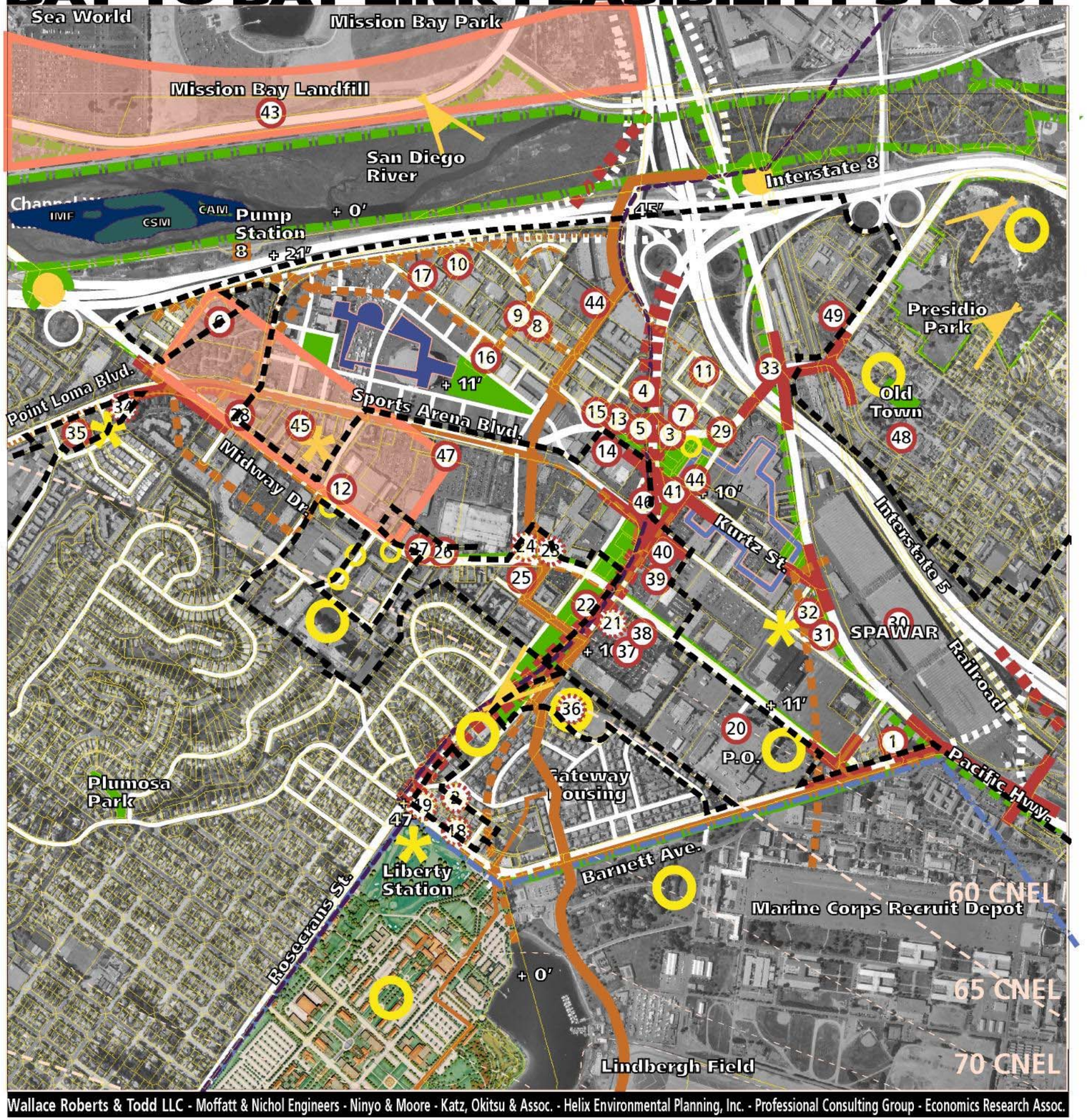
300' 1000'

6 February 2003

City of San Diego
Transportation & Drainage Design Division, Engineering & Capital Projects
Redevelopment Agency, Community and Economic Development

BAY TO BAY LINK FEASIBILITY STUDY

Opportunities & Constraints Diagram
Non-Tidal Channel Concept Alternative



- Redevelopment Area Boundary
- Multiple Species Conservation Program
  Brackish Marsh, Coastal Salt Marsh, Intertidal
- Cultural Resources, *general locations*
- Subsurface Archaeological Sites
- Pedestrian/Bicycle access to the San Diego River Park Trail network
- 96" Sanitary Sewer
- 16" - 30" Sanitary Sewer
- 32" - 56" Storm Drain
- 22" - 30" Storm Drain
- 24" Water LIne
- 8" Navy Jet Fuel Line
- Municipal Land Fill
- 44 Closed File for Leaking Underground Storage Tank
- 2 Open File for Leaking Underground Storage Tank
- Key Observation Points
- Additional Traffic Capacity is required
- Deficient intersection, level of service, safety
- Coastal Zone Boundary
- Community Noise Equilivant Level (CNEL)
- + 10' Elevation

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300' 1000'

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San Antonio Riverwalk
River Walk is an early example of a riverfront park that became a catalyst for revitalizing not just a neglected waterway, but an entire community. Twenty-one bridges, each unique, and 31 stone stairways connect the river level with downtown San Antonio streets; the varied landscape provides opportunities for people to jog or amble, people-watch, eat, shop, sightsee and celebrate, attend entertainment events - or just sit in tranquility.
Source: http://pps.org/gps/one?public_place_id=22

Capitol City Landing, Indianapolis, Indiana

Richmond Canal, Richmond, Virginia
The Canal Redevelopment Project was developed in response to the federally mandated Combined Sewer Overflow project for downtown Richmond. The installation of the new collector pipes and regulators allowed redeveloping the canal as a public amenity and catalyst for redevelopment of adjacent districts.

Waterfront Engineering

Dredge Channel
Assumptions:
1. Average ground elevation is +10 ft MLLW.
2. Since an internal waterway is not subject to tidal influences, the channel depth is estimated at 6 feet, plus 2 feet of freeboard for flood control. Therefore, the channel bottom depth is at +2 feet MLLW.
3. There are two water loops proposed, the Western Loop and the Eastern Loop. The channels would be excavated from the land and in the dry, then filled with water after fully constructed.

Construct Seawall
Because of the limited area, a vertical seawall is assumed for the Study Alternative. A revetted slope would require much more width than is available or assumed at this time. The vertical seawall will be more expensive to construct, but will utilize the space much better.

Maintenance Dredging in Proposed Channels
Minimal maintenance dredging is expected for this alternative, since there would not be any natural deposition sources.

Water Circulation (Pumps)
Pumps will probably be needed for the internal waterway park system. It is assumed that 4 pumps may be needed to provide adequate circulation and water quality (two in each loop).

Relocate Wet Utilities
This alternative also includes demolition and relocation of sewer and storm systems. The 96-inch sewer main will not need to be relocated for this revised alternative. Only minor segments of the larger storm drain network may need to be relocated.

Water Quality & Biological Resources

WATER QUALITY

Grading/excavation associated with redevelopment, public open space/park lands and two channel systems would result in a potential for erosion/sedimentation. The potential for contamination from construction-related hazardous materials also would exist from the construction activities. Similar to the situation described above for the Park System Linkage Concept Alternative, the potential for transport of sediment and contaminants would be limited because the project would not be directly connected to sensitive water bodies. The overall potential for contamination would, however, be greater than with the Park System Linkage Alternative because of the amount of construction involved and the associated length of the construction period. Because project-related grading would exceed five acres, the General Construction Activity Storm Water Permit, with associated measures to minimize potential water quality impacts, would be required as described above.

This alternative would result in the potential need for dewatering associated with grading activities, particularly channel creation. This would be of particular concern in areas containing hazardous materials.

Disposal of effluent in this situation could be problematic as the additional flows of dewatering groundwater could strain the sewer system. Regardless, water quality standards would need to be met, which would minimize any potential impact but could be difficult to achieve.

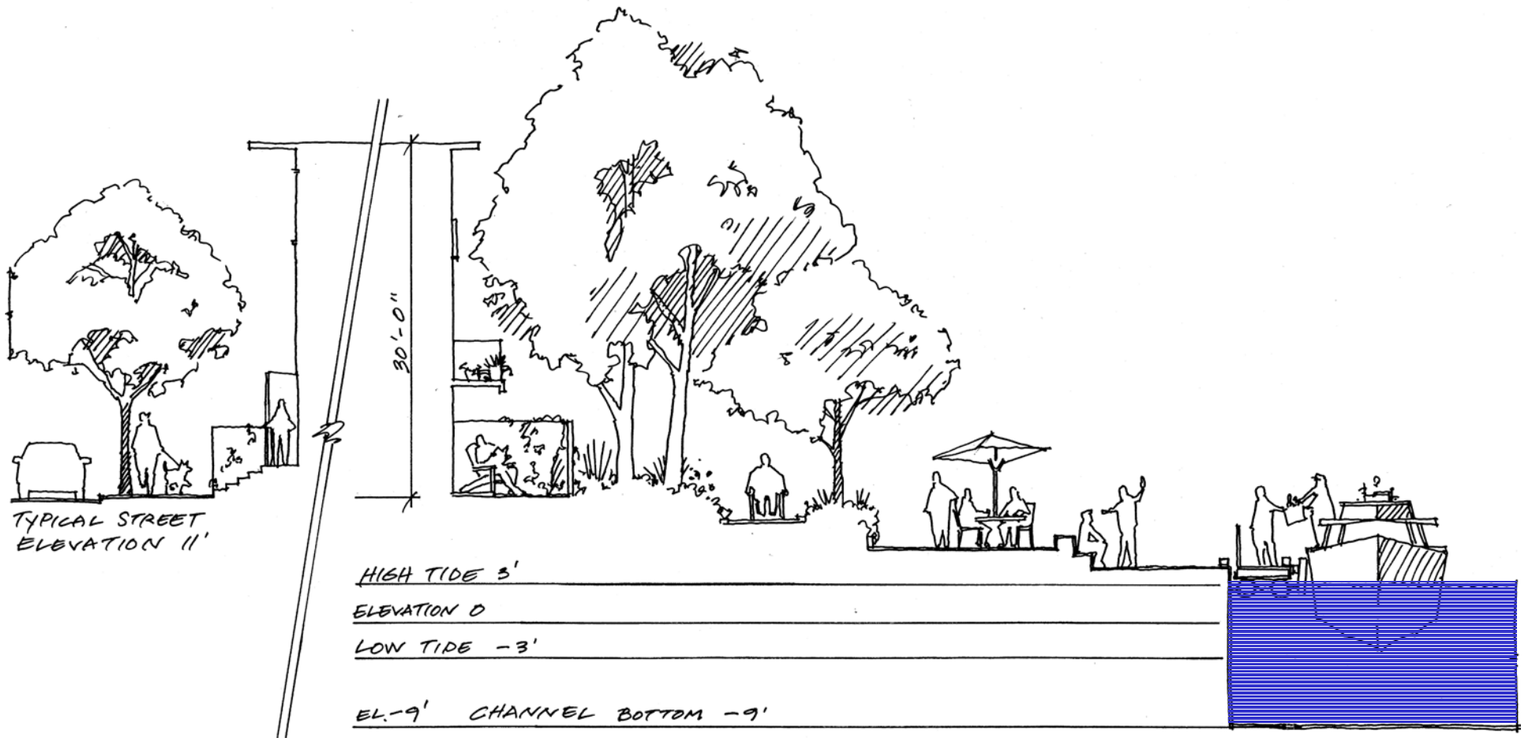
Similar to the Park System Linkage Concept Alternative, this alternative would result in the potential for the generation of urban contaminants associated with redevelopment and landscaping. There would be somewhat less park land (and presumably landscaping) associated with this alternative than with the Park System Linkage Alternative due to presence of the channel rather than greensward. As noted above, the project would be required to implement measures to comply with NPDES and associated City requirements regarding water quality and runoff discharge. Any water quality issues associated with the channel (including potential for seepage of contaminated groundwater) would be relatively contained, as the channels would not be connected to any existing water bodies.

Dry Construction of Atlantis Marina, Paradise Island, Bahamas

BIOLOGICAL RESOURCES

Similar to the Park System Linkage Concept Alternative, all activities associated with this alternative would be located south of Interstate 8 (and thus buffered from sensitive habitats in the San Diego River) and no changes to the San Diego Bay are proposed. No direct impacts to sensitive habitats would, therefore, occur, and any indirect impacts would be minimal. Runoff associated with redevelopment and landscaping would be filtered before reaching any natural water bodies. Any changes to the hydrologic regime associated with the construction of the proposed channels would be anticipated to be minimal.

There is some potential for the channel and park lands to be used by various wildlife species. This could be assessed as a (relatively minimal) benefit, but would be of concern if the water in the channel became highly polluted due to contaminated runoff, motorized boat usage or seepage of contaminated groundwater, and would be limited by the human use of the area. No long-term habitat changes would be anticipated for this alternative. Human use would likely be focused on the channels, and any related increase in human use of nearby habitat areas would be expected to be minimal. Any noise impact related to the use of motorized boats in the channels (which are removed from sensitive habitat areas) also would be minimal.



Navigable Channel Alternative

This Alternative proposes 34 acres of park land including:

- Neighborhood park along Rosecrans; and
- Small park areas on the Sports Arena Site associated with the waterway, inland harbor, housing and multiple use development.
- Public park land along Kurtz Street, linking SPAWAR and commercial uses with the proposed multiple-use development and La Playa Park.

The water area would be unique type of public open space that could count toward meeting the park land requirements.

The channel extends through the center of La Playa Park.

Low profile boats in the St. Petersburg Canal, Russia